

Title (en)  
INTERNAL COMBUSTION ENGINE

Title (de)  
VERBRENNUNGSMOTOR

Title (fr)  
MOTEUR À COMBUSTION INTERNE

Publication  
**EP 3536926 B1 20210407 (EN)**

Application  
**EP 19151028 A 20190109**

Priority  
JP 2018041048 A 20180307

Abstract (en)  
[origin: EP3536926A1] An internal combustion engine includes a fuel injection nozzle provided with a nozzle hole for injecting fuel, the nozzle hole exposed from a cylinder head of the internal combustion engine to a combustion chamber, and a hollow duct, an inlet and an outlet of which are exposed to the combustion chamber. The duct is provided in a manner allowing fuel spray injected from the nozzle hole of the fuel injection nozzle to pass through from the inlet to the outlet. The fuel injection nozzle and the duct are configured such that a part of fuel spray that is injected in pilot injection that is performed before main injection directly adheres to an inner wall surface of the duct.

IPC 8 full level  
**F02B 23/02** (2006.01); **F02B 23/06** (2006.01); **F02D 41/04** (2006.01); **F02D 41/40** (2006.01); **F02M 45/02** (2006.01); **F02M 61/16** (2006.01); **F02M 61/14** (2006.01); **F02M 61/18** (2006.01)

CPC (source: CN EP KR RU US)  
**F02B 1/12** (2013.01 - US); **F02B 3/06** (2013.01 - US); **F02B 23/02** (2013.01 - CN EP RU US); **F02B 23/0651** (2013.01 - EP RU US); **F02B 23/0654** (2013.01 - RU); **F02B 23/0666** (2013.01 - RU); **F02B 23/0669** (2013.01 - EP RU US); **F02D 35/028** (2013.01 - US); **F02D 41/047** (2013.01 - EP US); **F02D 41/30** (2013.01 - CN RU); **F02D 41/3017** (2013.01 - US); **F02D 41/40** (2013.01 - RU US); **F02D 41/402** (2013.01 - RU); **F02D 41/403** (2013.01 - EP KR RU US); **F02M 45/02** (2013.01 - EP US); **F02M 61/10** (2013.01 - KR); **F02M 61/14** (2013.01 - CN RU); **F02M 61/161** (2013.01 - EP US); **F02M 61/1806** (2013.01 - KR); **F02M 61/1813** (2013.01 - RU); **F02M 61/1853** (2013.01 - RU); **F02M 63/0014** (2013.01 - KR); **F02B 2075/125** (2013.01 - US); **F02D 35/023** (2013.01 - US); **F02M 61/14** (2013.01 - EP US); **F02M 61/1806** (2013.01 - US); **F02M 61/1813** (2013.01 - EP US); **Y02T 10/12** (2013.01 - EP); **Y02T 10/40** (2013.01 - EP)

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US2022065158A1

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AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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**EP 3536926 A1 20190911**; **EP 3536926 B1 20210407**; BR 102019000555 A2 20190917; CN 110242399 A 20190917; CN 110242399 B 20210420; JP 2019157647 A 20190919; JP 6888570 B2 20210616; KR 20190106767 A 20190918; RU 2716937 C1 20200317; US 10808601 B2 20201020; US 2019277185 A1 20190912

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